



# UNITED STATES PATENT AND TRADEMARK OFFICE

H.A.  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,825	11/05/2003	Yutaka Ban	00684.002986.1	6249
5514	7590	09/20/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			GRAINGER, QUANA MASHELL	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/700,825

Applicant(s)

BAN ET AL.

Examiner

Quana M. Grainger

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-24-2006</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 7-24-2006 was considered by the examiner.

### ***Claim Objections***

2. Claims 16-23 are objected to because of the following informalities. It is unclear what the phrase “a rotatable member” refers to in claim 1 since this terminology is not discussed in the specification. The examiner will take the rotational member discussed in the specification to be the claimed “rotatable member”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 16-23 are rejected under 35 U.S.C. 102(a) as being anticipated by Kanamori (ep0905577a2). Kanamori teaches a toner supply container detachably mountable to an image forming apparatus, said toner supply container 1 comprising: a container body 11 for containing toner, said container body having an opening; a shutter 16 for closing and opening the opening; a

Art Unit: 2852

first gear portion 22a provided in said shutter; a rotatable member 15 manually rotatable relative to said container body in a first rotational direction and a second rotational direction opposite to the first rotational direction [0076, 0082]; and a second gear portion 15a provided in said rotatable member 15, wherein in a state in which said toner supply container is set to the image forming apparatus, a drive transmission path from said rotatable member to said shutter is established by engagement of said first gear portion with a first gear member of a drive transmission mechanism provided in the image forming apparatus and engagement of said second gear portion with a second gear member of the drive transmission mechanism, and said shutter is movable toward an opening position by a rotation of said rotatable member in the first rotational direction and is movable toward a closing position by a rotation of said rotatable member in the second rotational direction, wherein said rotatable member is contactable to a part of the image forming apparatus in a mounting operation of said toner supply container to the image forming apparatus and rotates the first rotational direction to a predetermined first position with the mounting operation before the drive transmission path is established, wherein in a state in which said toner supply container is set to the image forming apparatus, when said rotatable member is rotated in the second rotational direction to close said shutter, said rotatable member is rotatable to a predetermined second position which is downstream of said first position with respect to the second rotational direction, wherein in a dismounting operation for dismounting said toner supply container from the image forming apparatus, container; the shutter of which is closed, apparatus, said rotatable member is rotatable in the first rotational direction from the second position to the first position before the drive transmission path is disconnected by said rotatable member contacting a part of the image forming apparatus, and wherein said shutter is

Art Unit: 2852

substantially non-movable toward the opening position when said rotatable member is rotating from the second position to the first position in the dismounting operation [0093 – 0099]. The toner supply container further comprising a locking member 15b for locking said rotatable member so as to allow a permissible predetermined amount of rotation, said locking member releasing said rotatable member upon completion of the mounting operation of said toner supply container to the image forming apparatus [0084]. The container body is mounted substantially non-rotatably to the image forming apparatus (figures 5, 20, 21, 39). The shutter 16 is disengageable with a main assembly shutter 34 for opening and closing a toner receiving opening provided in the image forming apparatus, wherein said shutter and the main assembly shutter are movable integrally with each other.

Kanamori et al. teaches an image forming apparatus comprising: image forming means for forming a toner image on an image bearing member; a container mounting and dismounting portion for mounting and dismounting a toner supply container containing toner; a drive transmission mechanism including a second gear member for receiving a driving force container and a first gear member for transmitting the driving force received from the second gear member to said toner supply container; said toner supply container being detachably mountable to the container mounting and dismounting portion, said toner supply container including: a container body for containing toner, said container body having an opening; a shutter for closing and opening said opening; a first gear portion provided in said shutter; a rotatable member manually rotatable relative to said container body in a first rotational direction and a second rotational direction opposite the first rotational direction; and a second gear portion provided in said rotatable member, wherein in a state in which said toner supply container is set to the image

Art Unit: 2852

forming apparatus, a drive transmission path from said rotatable member to said shutter is established by engagement of said first gear portion with said first gear member and engagement of said second gear portion with said second gear member, and said shutter is movable toward an opening position by a rotation of said rotatable member in the first rotational direction and is movable toward a closing position by a rotation of said rotatable member in the second rotational direction, wherein said rotatable member is contactable to a part of the image forming apparatus in a mounting operation of said toner supply container to the image forming apparatus and rotates to-rotate in the first rotational direction to a predetermined first position with the mounting operation before the drive transmission path is established, wherein in a state in which said toner supply container is set to the image forming apparatus, when said rotatable member is rotated in the second rotational direction to close said shutter, said rotatable member is rotatable to a predetermined second position which is downstream of said first position with respect to the second rotational direction, wherein in a dismounting operation for dismounting said toner supply container from the image forming apparatus container; the shutter of which is closed, from said rotatable member is rotatable in the first rotational direction from the second position to the first position before the drive transmission path is disconnected by said rotatable member contacting a part of the image forming apparatus, wherein said shutter is substantially non-movable toward the opening position when said rotatable member is rotating from the second position to the first position in the dismounting operation [0076, 0082, 0084, 93-99].

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 16-23 have been considered but are moot in view of the new ground(s) of rejection. However, several cited references are discussed below.

Art Unit: 2852

Weed (5,548,384), which was cited on a previous 892 form, teaches a shutter 36, a rotatable member 26 having a gear 70, and a container body. However, Weed does not teach that the shutter contains a gear. Miura et al. (5,331,382) does not include a rotatable member. Finally, Makino (5,608,501) does not include a shutter having a gear.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana M. Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Quana M Grainger  
Primary Examiner

Application/Control Number: 10/700,825

Page 7

Art Unit: 2852

Art Unit 2852

QG